State of South Carolina's Coastal Resources



Blue Crab Update

Introduction

Blue crabs are harvested commercially and recreationally in South Carolina, primarily using crab traps, often called pots. Blue crab is one of the primary commercial species statewide, accounting for approximately 10% of the total value of all commercial landings. This report provides an update on the 2006 status of blue crab in South Carolina. Previous status reports up to 2005 are available at http://www.dnr.state.sc.us/marine/.

Commercial Fishery Harvest

Blue crab landings have historically been the most stable of all the state's commercial fisheries with landings averaging just under 6 million pounds since 1979 (Figure 1). Commercial landings of blue crab in 2006 totaled 4.14 million pounds, well below the long term average but fairly consistent with landings since 2002. The \$3.05 million in landings during 2006 was lower than the previous two years and the lowest value on record since 1993. A slight decline was also seen in unit value. The decline in total catch may be largely explained by reduced price per pound being paid during fall, which resulted in less fishing effort during that season (which has historically been the period of highest landings).

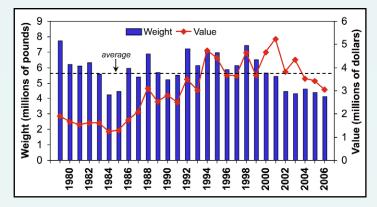


Figure 1. South Carolina commercial hard blue crab landings and values, all gears.

Hard crab licenses in South Carolina have fluctuated in accordance with prices and crab availability. The number of licenses sold over the past few years has remained fairly stable; however a 15% decrease was seen in the number of resident licenses sold in the 2006-07 season when compared with the 2005-06 season (Table 1). Eight non-resident licenses were sold during the 2006-07 season.

Since May 1997, crabbers have been required to license the number of pots they wish to fish. There was an increase in the number of pots licensed through 2004, perhaps reflecting concerns fisher-

Table 1. Number of SC hard blue crab licenses.			
Year	Resident	Non-resident	Total
2001	380	8	388
2002	401	9	410
2003	410	7	417
2004	428	6	434
2005	386	7	393
2006	366	6	372
2007	312	8	320

men had about discussion of potential regulations to limit fishing effort; however, a field count of actual pots in use in August 2003 and reported pot use from fishermen suggests that only about 1/3 of the pots licensed are fished. In the 2006-07 season approximately 29,000 crab pots were licensed in South Carolina which represents a 14% decrease from the 2005-06 season (Figure 2). This decrease was accompanied by a decrease in reported fishing effort. The mean number of crab pots fished daily decreased by 38%, 43%, and 36% in September, October, and November, respectively, from 2003 to 2006 (Figure 3).

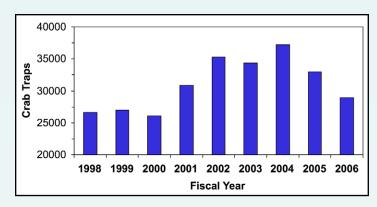


Figure 2. Number of licensed commercial crab traps in SC.

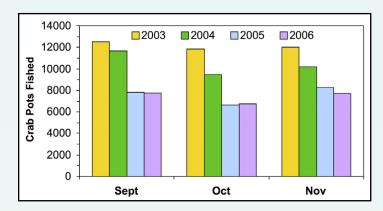


Figure 3. Average daily crab pots fished in fall 2003-2006.

Softshell Crab Fishery

About 60,000 pounds of peeler crabs were landed in 2006, showing a slight decline from last year, but still exceeding landings from the three previous years. A decline was also seen in both total landings value (\$240,745) and unit value (\$3.99/lb). However, these values were still well above the long term average (Figure 4).

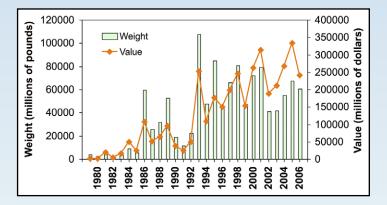


Figure 4. Weight and value of SC peeler crabs.

Fishery Independent Sampling

Numbers of blue crab in SCDNR trawl samples began to increase in December of 2003, and continued through spring of 2004, indicating an apparent recovery from the low levels seen in 2001-2002 during the prolonged drought (Figure 5). Overall numbers through 2006 were still less than the decade-long average, although the fall crab potting survey yielded better than average numbers of mature female blue crab, which is important for the continued sustainability of stocks (Figure 6). Although the long-term drought ended in 2002, most years in the last decade in South Carolina have had periods of drought, reflected by higher salinity (salt content of water; Figure 7). This results in displacement of blue crab greater distances up rivers above legal crab harvest boundaries, where there is less space and greater distance for the maturing female crab to travel to preferred egg laying areas near the coast.

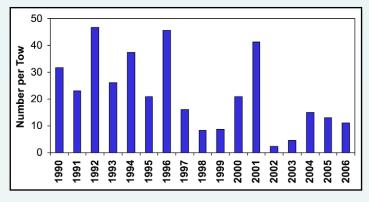


Figure 5. Number of blue crabs caught by trawl from SCDNR fishery independent surveys.

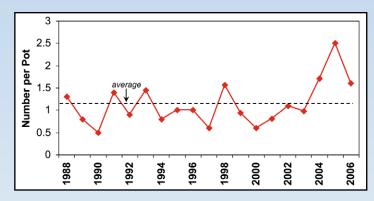


Figure 6. Number of mature female blue crabs per pot in SCDNR surveys.

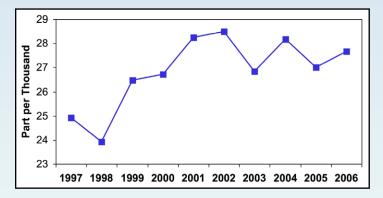


Figure 7. Salinity at MRD boatslip at Ft. Johnson on Charleston Harbor.

Overall Condition of the Stock

Blue crab stocks have recovered from the low levels observed during 2001-2003; however, landings and fishery independent sampling indicate that stocks are still below the long-term average. Low commercial landings appear to be primarily related to the impact of poor market prices that has resulted in a decline in fishing effort. Anecdotal reports from spring 2006 suggest the number of spawners have returned to historical highs.

Legislative Updates

Proposed legislation still pending represents the culmination of deliberations begun in 2002 in response to concerns over blue crab stocks during the severe drought. Proposed changes include: limits on number of commercial crabbers and pots, a one-bushel

recreational limit, a separate "peeler" pot license, and an experimental trotline fishery in some designated areas during future droughts.





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